

34. The method of claim 33, wherein the measuring a voltage comprises measuring a voltage where the at least one electrode of the second pair comprises an electrode associated with the left ventricle.

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35. The method of claim 33, wherein the measuring a voltage comprises measuring a voltage where the at least one electrode of the second pair comprises an electrode associated with the left atrium.

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36. The method of claim 33, wherein the measuring a voltage comprises measuring a voltage where the electrodes of the second pair of electrodes each comprise a left side heart electrode.

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37. The method of claim 36, wherein the measuring a voltage comprises measuring a voltage where one of the left side heart electrodes comprises an electrode associated with the left atrium, and the other of the left side heart electrodes comprises an electrode associated with the left ventricle.

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38. The method of claim 36, wherein the measuring a voltage comprises measuring a voltage where each of the electrodes of the second pair are associated with the left atrium.

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39. The method of claim 36, wherein the measuring a voltage comprises measuring a voltage where each of the electrodes of the second pair are associated with the left ventricle.

40. The method of claim 33, wherein the establishing a current path and the measuring a voltage are performed where the first and second pair of electrodes have no electrodes in common.

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41. The method of claim 40, wherein the establishing a current path and the measuring a voltage are performed where each electrode of the first and second pair are left side heart electrodes.

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42. The method of claim 41, wherein the establishing a current path and the measuring a voltage are performed where each pair of electrodes comprises a left atrial electrode and a left ventricular electrode.

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43. The method of claim 40, wherein the establishing a current path and the measuring a voltage are performed where the second pair of electrodes comprises electrodes associated with the left ventricle.

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44. The method of claim 40, wherein the establishing a current path and the measuring a voltage are performed where the second pair of electrodes comprise electrodes associated with the left atrium.

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45. The method of claim 40, wherein the establishing a current path and the measuring a voltage are performed where one electrode of the second pair comprises an electrode associated with the left atrium, and the other electrode of the second pair comprises an electrode associated with the left ventricle.

46. The method of claim 40, wherein the establishing a current path and the measuring a voltage are performed where one electrode of the first pair comprises an electrode associated with the left ventricle, and one electrode of the second pair comprises an electrode associated with the left ventricle.

47. The method of claim 40, wherein the establishing a current path and the measuring a voltage are performed where one electrode of the first pair comprises an electrode associated with the left atrium, and one electrode of the second pair comprises an electrode associated with the left atrium.

48. The method of claim 40, wherein the establishing a current path and the measuring a voltage are performed where only one electrode of the second pair comprises an electrode associated with the left atrium.

49. The method of claim 48, wherein the establishing a current path and the measuring a voltage are performed where only one electrode of the first pair comprises an electrode associated with the left atrium.

50. The method of claim 33, wherein the establishing a current path and the measuring a voltage are performed where the first and second pair of electrodes share at least one common electrode.

51. The method of claim 50, wherein the establishing a current path and the measuring a voltage are performed where the at least one shared electrode is associated with the left ventricle.

5 52. The method of claim 50, wherein the establishing a current path and the measuring a voltage are performed where the at least one shared electrode is associated with the left atrium.

53. The method of claim 50, wherein the establishing a current path and
10 the measuring a voltage are performed where the first and second pair share two common electrodes.

54. The method of claim 53, wherein the establishing a current path and the measuring a voltage are performed where the two common electrodes are
15 associated with the left ventricle.

55. The method of claim 53, wherein the establishing a current path and the measuring a voltage are performed where one of the two common electrodes is associated with the left atrium, and the other of the common electrodes is
20 associated with the left ventricle.

56. The method of claim 53, wherein the establishing a current path and the measuring a voltage are performed where only one of the shared electrodes is associated with the left side of the heart.

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57. The method of claim 33 further comprising controlling stimulation therapy as a function of the impedance.

58. One or more computer-readable media having computer-readable instructions thereon which, when executed by one or more processors, cause the processors to implement the method of claim 33.

59. A method of assessing a patient's cardiac condition comprising:
establishing a current path between a first pair of electrodes configured for use internally in a patient;
measuring a voltage between a second pair of electrodes configured for use internally of a patient, at least one electrode of the second pair comprising a left side heart electrode;
calculating an impedance based upon the established current and the measured voltage; and
based on the calculated impedance, determining one or more physiological parameters for assessing a patient's cardiac condition.

60. The method of claim 59, wherein the determining comprises determining a respiration parameter.

61. The method of claim 59, wherein the determining comprises determining a parameter associated with left ventricular wall dynamics.

62. The method of claim 59, wherein the determining comprises determining a parameter associated with left ventricular volume.

63. One or more computer-readable media having computer-readable
5 instructions thereon which, when executed by one or more processors, cause the processors to implement the method of claim 59.

64. One or more computer-readable media having computer-readable
instructions thereon which, when executed by one or more processors, cause the
10 processors to implement the method of claim 60.

65. One or more computer-readable media having computer-readable
instructions thereon which, when executed by one or more processors, cause the
processors to implement the method of claim 61.

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66. One or more computer-readable media having computer-readable
instructions thereon which, when executed by one or more processors, cause the
processors to implement the method of claim 62.